



JFW  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:  
Denis Gravel *et al.*

Serial No.: 10/727,119

Filed: December 3, 2003

For: DERIVATIVES OF SUCCINIC AND  
GLUTARIC ACIDS AND ANALOGS  
THEREOF USEFUL AS INHIBITORS OF  
PHEX

Group Art Unit: 1626

Examiner: Unknown

Atty. Dkt. No.: GOUD:045US

CERTIFICATE OF MAILING  
37 C.F.R. 1.8

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: MS AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:

August 18, 2004

Date

*Michael R. Krawzsenek*  
Michael R. Krawzsenek

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

MS AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Supplemental Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R §§ 1.97(g), (h), this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be

construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

The present Supplemental Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with the filing of this Supplemental Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski Deposit Account No.: 50-1212/GOUD:045US.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,



Michael R. Krawzsenek  
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Date: August 18, 2004



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August 18, 2004

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August 18, 2004

Date

Michael R. Krawzsenek

### MS AMENDMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

RE: *U.S. Patent Application No. 10/727,119 entitled "DERIVATIVES OF SUCCINIC AND GLUTARIC ACIDS AND ANALOGS THEREOF USEFUL AS INHIBITORS OF PHEX" – Denis Gravel et al.*  
*Our reference: GOUD:045US*  
*Client reference: 769/12987.28*

Sir:

Enclosed for filing in the above-referenced patent application is a Supplemental Information Disclosure Statement, Form PTO-1449, and references B2-B12 and C38-C46.

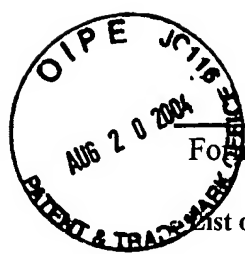
No fees are believed to be due in connection with the filing of this Supplemental Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to the enclosed materials, the Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski Deposit Account No.: 50-1212/GOUD:045US.

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Respectfully submitted,

Michael R. Krawzsenek  
Reg. No. 51,898

MRK/kmv  
Encl.: as noted



Form PTO-1449 (modified)		Atty. Docket No. <b>GOUD:045US</b>	Serial No. <b>10/727,119</b>
List of Patents and Publications for Applicant's  INFORMATION DISCLOSURE STATEMENT  (Use several sheets if necessary)		Applicant <b>Denis Gravel et al.</b>	
		Filing Date: <b>December 3, 2003</b>	Group: <b>1626</b>
U.S. Patent Documents <i>See Page 1</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Page 1</i>	

**U.S. Patent Documents**

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.

**Foreign Patent Documents**

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B2	EP 0 254 032	1/27/88	Europe			English
	B3	EP 0 412 595	2/13/91	Europe			English
	B4	EP 0 566 157	10/20/93	Europe			English
	B5	FR 2372804	6/30/78	France			Abstract
	B6	FR 2377374	8/11/78	France			Abstract
	B7	WO 00/5080	8/31/00	PCT			English
	B8	WO 02/092128	11/21/02	PCT			English
	B9	WO 02/15918	2/28/02	PCT			English
	B10	WO 03/084997	10/16/03	PCT			English
	B11	WO 97/05865	2/20/97	PCT			English
	B12	WO 99/11606	3/11/99	PCT			English

**Other Art (Including Author, Title, Date Pertinent Pages, Etc.)**

Exam. Init.	Ref. Des.	Citation
	C38	Boileau <i>et al.</i> , "Characterization of PHEX endopeptidase catalytic activity: identification of parathyroid-hormone-related peptide <sub>107-139</sub> as a substrate and osteocalcin, PP <sub>i</sub> and phosphate as inhibitors," <i>Biochem. J.</i> , 355:707-713, 2001.
	C39	Chapman <i>et al.</i> , "Inhibition of matrix metalloproteinases by N-carboxyalkyl peptides," <i>J. Medicinal Chemistry</i> , abstract, 36(26):4293-4301, 1993.

25444629.1

**EXAMINER:****DATE CONSIDERED:**

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

Form PTO-1449 (modified)		Atty. Docket No. GOUD:045US	Serial No. 10/727,119
List of Patents and Publications for Applicant's  INFORMATION DISCLOSURE STATEMENT  (Use several sheets if necessary)		Applicant Denis Gravel et al.	
		Filing Date: December 3, 2003	Group: 1626
U.S. Patent Documents <i>See Page 1</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Page 1</i>	

### Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C40	Elgazwy and Abdel-Sattar, "Facile synthesis of (R,R) and of (R,S) tricarballic acid anhydride and imide derivatives," <i>Molecules</i> , abstract, 5(4):665-673, 2000.
	C41	Fourine-Zaluski <i>et al.</i> , "Differential recognition of 'enkephalinase' and angiotensin-converting enzyme by new carboxyalkyl inhibitors," <i>Life Sciences</i> , 31:2947-2954, 1982.
	C42	Mimura <i>et al.</i> , "A novel class of enkephalinase inhibitors containing a C-terminal sulfo group," <i>J. Med. Chem.</i> , 35:602-608, 1992.
	C43	Ovens <i>et al.</i> , "Design and synthesis of acidic dipeptide hydroxamate inhibitors of procollagen C-proteinase," <i>J. Peptide Science</i> , abstract 6(9):489-495, 2000.
	C44	Rinnova <i>et al.</i> , "An expedient method for the solid-phase synthesis of alpha-aminoalkyl phosphonopeptides," <i>Tetrahedron Lett</i> , abstract, 43(22):4103-4106, 2002.
	C45	Rowe, "The role of the phex gene (PEX) in families with X-linked hypophosphataemic rickets," <i>Curr. Opin Nephrol Hypertens</i> , 7:367-376, 1998.
	C46	Serval <i>et al.</i> , "In vitro and in vivo inhibition of N-acetyl-L-aspartyl-L-glutamate catabolism by N-acylated L-glutamate analogs," <i>J. Pharmacology and Experimental Therapeutics</i> , abstract, 260(3):1093-1100, 1992.

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